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(54) Title: PROCESSING GESTURE SIGNALS

a

b

c

d

(57) Abstract: A method of pre-processing gesture signals comprises the step of Filtering one or more signal segments by applying an infinite impulse response (IIR) filter both in a forward and in a backward temporal direction, so as to produce a band-limited gesture signal. The method may further comprise the step of matching the forward and backward initial conditions of the IIR filters to avoid any transients. Unevenly or sparsely sampled gesture signals may be subjected to the preliminary steps of interpolating the sampled signal, resampling the interpolated signal at a relatively high resampling frequency, filtering the resampled signal, and optionally downsampling the filtered signal, so as to produce a gesture signal having a well-defined sampling rate. An additional compression step may be carried out. The method may be utilized in conjunction with handwriting recognition methods.

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